## REMARKS

### I. Claim Rejections – 35 U.S.C. 102

The Examiner rejected claims 1, 7-8, 12-14 and 18 under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent 5,782,645 ("*Stobie*"). Claims 7 and 8 have been cancelled. Claims 1, 12-14 and 18 are not anticipated by the *Stobie*, at least because all the elements of claims 1, 12-14 and 18 are not found in *Stobie*.

"A patent is invalid for anticipation when the same device or method, having all of the elements contained in the claimed limitations, is described in a single prior art reference." *Crown Operations International, Ltd. v. Solutia, Inc.*, 289 F.3d 1367, 1375 (Fed. Cir. 2002).

*Stobie* does not disclose at least one element of independent claims 1 and 18 of the present invention. With respect to claim 1, *Stobie* does not disclose "at least two multi-conductor cables, each cable having a plurality of at least partially-exposed conductors, with the exposed conductors of two of the cables *in proximity to one another*, at least one such cable being a *multi-axial cable comprising at least two spaced coaxial conductors*." With respect to claim 18, *Stobie* does not disclose "a layer of anisotropic conductive elastomer (ACE) *in direct contact with the conductors of both of the flex cables*."

#### A. *Stobie* does not anticipate independent claim 1 of the present invention.

*Stobie* discloses two multiconductor cables 32 and 42, each with individual conductors 33 and 43, respectively. *Stobie*, at col. 5, line 5; col. 6, lines 14-15; and Figures 1-4, references 32, 33, 42 and 43. "Each of the several conductors 43 of the cable 42 is connected electrically with a terminal end 100 of a respective one of the electrically conductive rods 88, and each of the respective conductors 33 of the cable 32 is connected to a respective terminal end 102 of a

respective one of the electrically conductive rods 90." *Stobie*, at col. 6, lines 14-21.

1. Stobie does not disclose "at least one such cable being a multi-axial cable comprising at least two spaced coaxial cables."

As the Examiner acknowledges, *Stobie* does *not* disclose "the cable is being as a coaxial cable conductor." *August 14, 2006 Office Action*, at page 6. The Examiner, however, rejected claim 1 and stated, "[i]t has been held that a recitation with respect to the manner in which a claimed apparatus is intended to be employed does not differentiate the claimed apparatus from a prior art apparatus claiming the structural limitation. *Ex Parte Masham*, 2 USPQ2d 1647 (1987)." *Id.*

The Applicant respectfully contends that *Ex Parte Masham* is distinguishable from the present case. At issue in *Ex Parte Masham* was a single means plus function claim, as follows:

> 1. An apparatus for mixing flowing developer material, including:
> means defining a chamber, for receiving the flowing developer material therein; and
> means for mixing the [flowing] developer material, said mixing means being stationary and completely submerged in the developer material.

*Ex Parte Masham*, 2 U.S.P.Q. 2d 1647 (Bd. Pat. App. & Int. 1987).

Masham argued that in the cited reference, Williams, "the mixing means is depicted 'as only being partially submerged in the developer material.'" *Id.* The Board of Patent Appeals and Interferences affirmed the rejection of claim 1 under 35 U.S.C. 102(b), stating, "the examiner has factually determined that William's mixing device 40 is *capable* of being totally submerged in the developer material...." *Id.* (emphasis in original). The Board further stated, "the apparatus disclosed by Williams does not undergo a metamorphosis to a new apparatus merely by affixing instructions thereto indicating that a sufficient amount of developer material may be poured into

the apparatus to completely submerge the stationary mixing means." *Id.* Clearly, then, the question in *Ex Parte Masham* was whether the claimed invention and the cited reference were capable of performing the same *function.*

Here, however, the differences between *Stobie* and the invention of claim 1 are not only functional, they are also *structural*, and certainly more than mere "instructions." Further, the invention disclosed in Stobie is *not* capable of connecting two multi-conductor cables, where at least one cable is "a multi-axial cable comprising at least two spaced coaxial conductors."

*Stobie* relates to "biologically implantable percutaneous connectors, and in particular, such connectors for use with cables including many small electrical conductors." *Stobie*, at col. 1, lines 9-12. "Each of the several conductors 43 of the cable 42 is connected electrically with a terminal end 100 of a respective one of the electrically conductive rods 88, and each of the respective conductors 33 of cable 32 is connected to a respective terminal end 102 of electrically conductive rods 90." *Stobie*, at col. 6, lines 14-19. "[T]he rods 88 and 90 may be arranged in perpendicular rows and files with center-to-center spacing in the row or file as small as 0.635 mm (0.025 inch).... An array of as many as 70 mating ends, to receive an equal number of individual conductors 33 or 43 can thus be included in a single percutaneous connector 20 that is 12.5 mm (0.5 inch) in diameter." *Stobie*, at col. 6, lines 25-32.

Stobie *would*, therefore, undergo "a metamorphosis to a new apparatus" if cables 32 and/or 42 of Stobie were replaced with multi-axial cables 80 and/or 82 of claim 1 of the present invention, (shown in Figure 7A), at least because the present invention's coaxial conductors 84 and 86 are incompatible with the "perpendicular rows and files" arrangement of Stobie's "electrically conductive rods."

As such, *Ex Parte Masham* is not applicable to the claimed invention, and claim 1 is not anticipated by *Stobie*

2. Stobie does not disclose "the exposed conductors of the cable in proximity to one another."

The Examiner states "[t]he length of *Stobie's* conductive rods is very small and thus the conductors are in proximity to one another." *August 14, 2006 Office Action*, at page 6.

The Applicant respectfully contends that the Examiner is impermissibly equating the *size* of the claimed elements with the *location* of the claimed elements. As shown in Figures 3 and 4 of *Stobie*, conductors 33 and 43 are terminated on conductive rods 88 and 90, respectively. Rods 88 are located in upper contact block 62, and rods 90 are located in lower contact block 22. "When the connector 20 is assembled as shown in FIG. 1, the contact blocks 22 and 62 are aligned with each other, aligning the arrays of conductive rods 88, 90 with each other. A mating end 110 of each conductive rod 88 of the upper contact block is thus located in direct alignment with a mating end of 112 of an electrically conductive rod 90 of the lower contact block 22, with the layer 44 of elastomeric anisotropic connector material located between corresponding ones of the mating ends 110 and the mating ends 112 and electrically interconnecting the corresponding ones of the conductive rods 88 and 90 with each other. *Stobie*, at col. 7, lines 15-25.

In *Stobie*, then, the *rods* 88 and 90, and *not the exposed conductors* 33 and 43, are in proximity to one another, and the *rods*, *not the exposed conductors*, are in contact with the layer of ACE. In contrast, in the invention of claim 1, the exposed conductors are in proximity to one another, and are in direct contact with the ACE layer, as shown in Figures 7A and 7B. As such, claim 1 is distinguishable from *Stobie*, as *Stobie* does not disclose "the exposed conductors of the

cable in proximity to one another."

**B. *Stobie* does not anticipate independent claim 18 of the present invention.**

The Examiner rejected claim 18 without further comment.

The Applicant respectfully contends that *Stobie* does not disclose "a layer of anisotropic conductive elastomer in *direct contact* with the conductors of both of the flex cables."

As discussed above with respect to claim 1, in *Stobie*, the *rods* 88 and 90, and *not the exposed conductors* 33 and 43, are in direct contact with the layer of ACE. In contrast, in the invention of claim 18, the exposed conductors are in *direct contact* with the ACE layer, as shown in Figures 7A and 7B. As such, claim 18 is distinguishable from *Stobie*, as *Stobie* does not disclose "a layer of anisotropic conductive elastomer in *direct contact* with the conductors of both of the flex cables."

**C. Stobie does not anticipate dependent claims 12-14 of the present invention.**

Claims 12-14 depend from claim 1, and are patentable for at least the reasons cited above for claim 1. As such, claims 12-14 are not anticipated by the *Stobie*.

**D. Conclusion**

In conclusion, *Stobie* does not disclose at least one element of independent claims 1 and 18 of the present invention. With respect to claim 1, *Stobie* does not disclose "at least two multi-conductor cables, each cable having a plurality of at least partially-exposed conductors, with the exposed conductors of two of the cables *in proximity to one another*, at least one such cable being a *multi-axial cable comprising at least two spaced coaxial conductors*." With respect to claim 18, *Stobie* does not disclose "a layer of anisotropic conductive elastomer (ACE) *in direct contact with the conductors of both of the flex cables*." Further, dependent claims 12-14 are

patentable for at least the same reasons.

## II. Claim Rejections – 35 U.S.C. 103

### A. Claims 1-2, 6, and 9-10 are patentable over *Niedzwiecki* in view of *Wood*.

The Examiner rejected claims 1-2, 6, and 9-10 under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent 3,613,049 ("*Niedzwiecki*") in view of U.S. Patent 4,808,112 ("*Wood*").

Claims 1-2, 6, and 9-10 are patentable over *Niedzwiecki* and *Wood* for at least two reasons. First, the Examiner's reasoning for combining the references is improper under the law of 35 U.S.C. § 103. Second, even if *Niedzwiecki* and *Wood* are combined, the combined references do not disclose all the elements of claims 1-2, 6, and 9-10.

1. The Examiner's reasoning for combining *Niedzwiecki* and *Wood* is improper under the law of 35 U.S.C. § 103.

In any obviousness determination, the patent examiner must determine the scope and content of the prior art, the differences between the prior art and the claims at issue, and the level of ordinary skill in the pertinent art, as established in *Graham v. John Deere Co.*, 383 U.S. 1, 148 U.S.P.Q. 459 (1966). Patentability turns on whether the subject matter as a whole sought to be patented was obvious to one with "ordinary skill in the art to which the subject matter pertains" in light of the prior art. *Id.* at 3. "In determining the differences between the prior art and the claims, the question under 35 U.S.C. § 103 is not whether the differences themselves would have been obvious, but whether the claimed invention as a whole would have been obvious." M.P.E.P. §2141.02, *citing*, *Stratoflex, Inc. v. Aeroquip Corp.*, 713 F.2d 1530, 218 U.S.P.Q. 871

(Fed. Cir. 1983); *Schenck v. Nortron Corp.*, 713 F.2d 782, 218 U.S.P.Q. 698 (Fed. Cir. 1983) (emphasis in original).

Further, when making any obviousness determination, there must be a suggestion or motivation to modify a prior art reference. "'Determining whether there is a suggestion or motivation to modify a prior art reference is one aspect of determining the scope and content of the prior art, a fact question subsidiary to the ultimate conclusion of obviousness.'" *Ruiz v. A.B. Chance*, 57 U.S.P.Q.2d at 1167, *quoting*, *Sibia Neurosciences, Inc. v. Cadus Pharma. Corp.*, 225 F.3d 1349, 1356, 55 U.S.P.Q.2d 1927, 1931 (Fed. Cir. 2000). The suggestion, teaching or reason must come from the prior art itself; it cannot be based on hindsight in view of the claims. *McGinley v. Franklin Sports, Inc.*, 60 U.S.P.Q.2d 1001, 1008 (Fed. Cir. 2001), *citing, In re Dembiczak*, 175 F.3d 994, 999, 50 U.S.P.Q.2d 1769 (Fed. Cir. 1999) ("guarding against falling victim to the insidious effect of a hindsight syndrome wherein that which only the inventor taught is used against its teacher"). In addition, no suggestion or motivation for modifying a reference exists if such a modification would render the invention of the reference unsatisfactory for its intended purposes. *See In re Gordon*, 733 F.2d 900, 221 U.S.P.Q. 1125 (Fed. Cir. 1984).

Secondary considerations of nonobviousness include commercial success, long felt but unresolved need, failure of others, copying, and unexpected results. *Ruiz v. A.B. Chance Co.*, 57 U.S.P.Q.2d 1161, 1165 (Fed. Cir. 2000) *citing*, *Graham v. John Deere Co.*, 383 U.S. 1, 17-18, 148 U.S.P.Q. 459, 467 (1966) and *Miles Labs., Inc. v. Shandon, Inc.*, 997 F.2d 870, 877, 27 U.S.P.Q.2d 1123, 1128 (Fed. Cir. 1993).

"[E]vidence of secondary considerations may often be the most probative and cogent evidence in the record. It may often establish that an invention appearing to have been obvious

in light of the prior art was not. It is to be considered as part of all the evidence, not just when the decision maker remains in doubt after reviewing the art." *Ruiz*, 57 U.S.P.Q.2d at 1169, *quoting*, *Stratoflex, Inc. v. Aeroquip Corp.*, 713 F.2d 1530, 1538, 218 U.S.P.Q. 871, 879 (Fed. Cir. 1983). "Such evidence 'may be sufficient to overcome a prima facie case of obviousness.'" *Ruiz*, 57 U.S.P.Q.2d at 1169, *quoting*, *In re Beattie*, 974 F.2d 1309, 1313, 24 U.S.P.Q.2d 1040, 1043 (Fed. Cir. 1992).

In this case, the combination of *Niedzwiecki* and *Wood* is improper because there is no suggestion or motivation in the prior art to make such a combination. The Examiner has made the combination using impermissible hindsight, and the invention as a whole is not obvious.

The Examiner states "[i]t would have been obvious to one having ordinary skill in the art at the time the invention was made to substitute the connection block in the *Niedzwiecki's* connector by the anisotropic conductive elastomer, as taught by Wood et al. for providing a low profile connector and reliable electrical connection." *August 14, 2006 Office Action*, at paragraph 4, page 3.

Here, claim 1 discloses a separable electrical connector with "at least two multi-conductor cables...at least one such cable being a multi-axial cable comprising at least two spaced coaxial conductors" and "anisotropic conductive elastomer (ACE) in electrical contact with the exposed conductors" of the cables.

- *Wood* "provides [a] method and apparatus for achieving a high density interconnection between at least two circuit boards, flexible circuits, or a mixture of both." *Wood*, at col. 1, lines 54-58. *Wood* defines a "flexible circuit" to be a "ribbon cable." *Wood*, at col. 2, line 59. "On each of the boards or flexible circuits the conductive paths are laid out in a complementary

pattern, so that when the boards and circuits are overlapped with the conductive paths facing each other, the paths to be interconnected one with the other are adjacent to each other when brought into alignment." *Wood*, at col. 1, lines 58-63.

*Wood* does *not* disclose or suggest combining "anisotropic conductive elastomer (ACE)" with "a multi-axial cable comprising at least two spaced coaxial conductors."

Further, the "multi-axial cable" of claim 1 could not physically be "laid out in a complementary pattern" to a circuit board or a ribbon cable, as taught by *Wood*. Clearly, then, modifying *Wood* by replacing one of the circuit boards or flexible circuits with a multi-axial cable of claim 1 of the present invention would destroy the intent, purpose and function of *Wood*, which is specifically intended to "interconnect[] flexible circuit strips and etched circuit boards." *Wood*, at col. 1, lines 7-9. As such, there is no suggestion or motivation for modifying *Wood*, because it would render *Wood* "unsatisfactory for its intended purpose." *In re Gordon*, 733 F.2d at 902.

The invention of *Niedzwiecki* "relates particularly to conductors for use with cables which are *flat* and flexible." *Niedzwiecki*, at col. 1, lines 5-7. "[T]he object of this invention is to achieve reliability, simplicity for use, and low cost in the manufacture and application of *flat cable* connectors." *Niedzwiecki*, at col. 1, lines 31-33. The cable connector of *Niedzwiecki* "comprises three basic parts, viz: two clamp blocks 11 and 12 and a center block 13." *Niedzwiecki*, at col. 2, lines 12-14. The center block 13 includes contact members 16, as shown in Figure 1 of As shown in Figures 1 and 2. "Each contact member is made from a single piece of wire...and is bent into an S-shape...." *Niedzwiecki*, at col. 2, lines 58-62. "As the clamp blocks 11 and 12 squeeze against the center block 13, the cables are pressed into the grooves 20

and around the center block 12 [and] the conductors are pressed against the contact members 16, thereby establishing an electrical connection between the conductors in the two cables." *Niedzwiecki*, at col. 3, lines 10-16.

As is the case with *Wood*, *Niedzwiecki* does *not* disclose or suggest combining "anisotropic conductive elastomer (ACE)" with "a multi-axial cable comprising at least two spaced coaxial conductors."

Further, the "multi-axial cable" of claim 1 could not physically be "pressed into the grooves 20 and around the center block 13" such that "the conductors 15 are pressed against the contact members 16," as taught by *Niedzwiecki.* Clearly, then, modifying *Niedzwiecki* by replacing one of the flat cables with a multi-axial cable of claim 1 of the present invention would destroy the intent, purpose and function of *Niedzwiecki*, which is specifically intended to provide "a connector for use with multiple conductor flat cables." *Niedzwiecki*, at col. 14, lines 13-14. As such, there is no suggestion or motivation for modifying *Niedzwiecki*, because it would render *Niedzwiecki* "unsatisfactory for its intended purpose." *In re Gordon*, 733 F.2d at 902.

The Examiner's combination of *Niedzwiecki* and *Wood*, then, is made without any suggestion in the art to make such combination. In fact, the only suggestion for electrically interconnecting the conductors of one multi-conductor cable with "a multi-axial cable comprising at least two spaced coaxial conductors" and "anisotropic conductive elastomer (ACE)" comes from Applicant's Patent Application. Thus, without the impermissible reference to Applicant's disclosure, there is no motivation to combine *Niedzwiecki* and *Wood*, and the invention as a whole is not obvious.

Further, the very fact that none of the cited references teach or suggest making the proposed modifications, particularly given the age of the references, indicates that the combinations are the result of hindsight. Since no one in the subject industry has ever made or marketed the claimed combination, this is strong evidence that the combination is not obvious. *Arkie Lures Inc. v. Gene Larew Tackle Inc.*, 43 U.S.P.Q.2d 1294, 1297 (Fed. Cir. 1997) ("the years of use of [the prior art], without combining their properties, weighs on the side of unobviousness of the combination."). When the prior art in question has been widely available for many years to persons skilled in the art without any suggestion to modify or combine, such widely available prior art is itself evidence of nonobviousness. *Ruiz*, at 1168, *quoting*, *Panduit Corp. v. Dennison Mfg. Co.*, 810 F.2d 1561, 1577, 1 U.S.P.Q.2d 1593, 1605 (Fed. Cir. 1987)("'[T]hat the elements noted by the court lay about in the prior art available for years to all skilled workers, without, as the court found, suggesting anything like the claimed inventions, is itself evidence of nonobviousness.'").

2. Even if combined, *Niedzwiecki* and *Wood* do not disclose all the elements of claims 1-2, 6, and 9-10.

"To establish *prima facie* case of obviousness of a claimed invention, all the claim limitations must be taught or suggested by the prior art." M.P.E.P. § 2143.03, *citing*, *In re Royka*, 490 F.2d 981, 180 U.S.P.Q. 580 (CCPA 1974). "All words in a claim must be considered in judging the patentability of that claim against the prior art." *Id.*, *citing*, *In re Wilson*, 424 F.2d 1382, 1385, 165 U.S.P.Q. 494, 496 (CCPA 1970).

The combination of *Niedzwiecki* and *Wood* does not disclose at least one element of independent claim 1, either directly or inherently. Neither reference, alone or in combination,

discloses "a multi-axial cable comprising at least two spaced coaxial conductors." Accordingly, combining *Niedzwiecki* and *Wood*, even if proper, cannot be read as disclosing all the elements of claim 1. Claims 2, 6, and 9-10, then, must also be patentable, since "[i]f an independent claim is nonobvious under 35 U.S.C. 103, then any claim depending therefrom is nonobvious." M.P.E.P. § 2143.03, *citing*, *In re Fine*, 837 F.3d 1071, 5 U.S.P.Q.2d 1596 (Fed. Cir. 1988).

3. Conclusion

Claims 1-2, 6, and 9-10 are patentable over *Niedzwiecki* and *Wood* for at least two reasons. First, the Examiner's reasoning for combining the references is improper under the law of 35 U.S.C. § 103. Second, even if *Niedzwiecki* and *Wood* are combined, the combined references do not disclose all the elements of claims 1-2, 6, and 9-10.

**B. Claims 3 and 11 are patentable over *Niedzwiecki* and *Wood* in view of *Buck*.**

The Examiner rejected claims 3-4 and 11 under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent 3,613,049 ("*Niedzwiecki*") and U.S. Patent 4,808,112 ("*Wood*") as applied to claim 1, and further in view of U.S. Patent 6,786,762 ("*Buck*"). Claim 4 has been cancelled.

As described in detail above, the combination of *Niedzwiecki* and *Wood* does not disclose at least one element of independent claim 1, either directly or inherently. Neither reference, alone or in combination, discloses "a multi-axial cable comprising at least two spaced coaxial conductors." Accordingly, combining *Niedzwiecki* and *Wood*, even if proper, cannot be read as disclosing all the elements of claim 1. Claims 3 and 11, then, must also be patentable, since "[i]f an independent claim is nonobvious under 35 U.S.C. 103, then any claim depending therefrom is nonobvious." M.P.E.P. § 2143.03, *citing*, *In re Fine*, 837 F.3d 1071, 5 U.S.P.Q.2d 1596 (Fed. Cir. 1988).

## III. Conclusion

For the above reasons, the Appellant respectfully submits that all pending claims comply are patentable over the references of record. Allowance is respectfully requested.

Respectfully submitted,

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